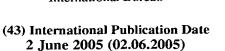
## (19) World Intellectual Property Organization

International Bureau





## 

## (10) International Publication Number WO 2005/050912 A1

(51) International Patent Classification7: G09C 1/04

H04L 9/32,

(21) International Application Number:

PCT/IB2003/006285

(22) International Filing Date:

18 November 2003 (18.11.2003)

(25) Filing Language:

English

(26) Publication Language:

English

- (71) Applicant (for all designated States except US): NOKIA CORPORATION [FI/FI]; Keilalahdentie 4, FIN-02150 Espoo (FI).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): ABILDGAARD, Flemming [DK/DK]; Weyegangen 4, 1.tv, DK-4000 Roskilde (DK).
- (74) Agent: HIGGIN, Paul; Swindell & Pearson, 48 Friar Gate, Derby DE1 1GY (GB).

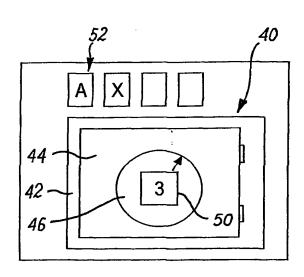
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A HAND-PORTABLE ELECTRONIC DEVICE FOR VERIFYING AN INPUT TEST SEQUENCE OF CHARAC-TERS AGAINST A PREDETERMINED SEQUENCE OF CHARACTERS



(57) Abstract: A hand-portable electronic device comprising: a memory for storing a security word as a predetermined sequence of characters; a rotator, having a tactile surface arranged for tactile actuation by a user, and mounted for rotation about an axis; feedback means separate from the rotator for providing feedback to a user as the rotator is rotated; conversion means for converting each rotation of a sequence of rotations of the rotator into a character of a corresponding ordered test sequence of characters; and verification means for verifying the test sequence of characters against the predetermined sequence of characters. A security method for a hand-portable electronic device comprising a rotator, the method comprising: a user making an ordered sequence of rotations of the rotator; providing at the device, separately from the rotator, feedback to the user as the rotator is rotated during the ordered sequence of rotations; and verifying whether the ordered sequence of rotations made by the user corresponds to a predetermined ordered sequence of rotations.

WO 2005/050912 A1